

7-18

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: In the nature of a substitute.

IN THE SENATE OF THE UNITED STATES—115th Cong., 2d Sess.

**S. 3277**

To reduce regulatory burdens and streamline processes related to commercial space activities, and for other purposes.

Referred to the Committee on \_\_\_\_\_ and  
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended  
to be proposed by Mr. CRUZ (for himself, Mr. NELSON,  
and Mr. MARKEY)

Viz:

1 Strike all after the enacting clause and insert the fol-  
2 lowing:

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) **SHORT TITLE.**—This Act may be cited as the  
5 “Space Frontier Act of 2019”.

6 (b) **TABLE OF CONTENTS.**—The table of contents of  
7 this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Definitions.

**TITLE I—STREAMLINING OVERSIGHT OF LAUNCH AND REENTRY  
ACTIVITIES**

Sec. 101. Office of Commercial Space Transportation.

Sec. 102. Use of existing authorities.

Sec. 103. Experimental permits.

Sec. 104. Space-related advisory rulemaking committees.

- Sec. 105. Government-developed space technology.
- Sec. 106. Regulatory reform.
- Sec. 107. Secretary of Transportation oversight and coordination of commercial launch and reentry operations.
- Sec. 108. Study on joint use of spaceports.
- Sec. 109. Airspace integration report.

**TITLE II—STREAMLINING OVERSIGHT OF NONGOVERNMENTAL  
EARTH OBSERVATION ACTIVITIES**

- Sec. 201. Nongovernmental Earth observation activities.
- Sec. 202. Radio-frequency mapping report.

**TITLE III—MISCELLANEOUS**

- Sec. 301. Promoting fairness and competitiveness for NASA partnership opportunities.
- Sec. 302. Lease of non-excess property.
- Sec. 303. Maintaining a national laboratory in space.
- Sec. 304. Presence in low-Earth orbit.
- Sec. 305. Continuation of the ISS.
- Sec. 306. United States policy on orbital debris.
- Sec. 307. Low-Earth orbit commercialization program.
- Sec. 308. Bureau of Space Commerce.

**1 SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) ISS.—The term “ISS” means the Inter-  
4 national Space Station.

5 (2) NASA.—The term “NASA” means the Na-  
6 tional Aeronautics and Space Administration,

7 (3) NOAA.—The term “NOAA” means the Na-  
8 tional Oceanic and Atmospheric Administration.

**1 TITLE I—STREAMLINING OVER-**  
**2 SIGHT OF LAUNCH AND RE-**  
**3 ENTRY ACTIVITIES**

**4 SEC. 101. OFFICE OF COMMERCIAL SPACE TRANSPOR-**  
**5 TATION.**

**6 (a) IN GENERAL.**—Section 50921 of title 51, United  
**7 States Code, is amended—**

**8 (1) by inserting “(b) AUTHORIZATION OF AP-**  
**9 PROPRIATIONS.—” before “There” and indenting**  
**10 appropriately; and**

**11 (2) by inserting before subsection (b), the fol-**  
**12 lowing:**

**13 “(a) ASSOCIATE ADMINISTRATOR FOR COMMERCIAL**  
**14 SPACE TRANSPORTATION.**—The Assistant Secretary for  
**15 Commercial Space Transportation shall serve as the Asso-**  
**16 ciate Administrator for Commercial Space Transpor-**  
**17 tation.”**

**18 (b) ESTABLISHMENT OF ASSISTANT SECRETARY FOR**  
**19 COMMERCIAL SPACE TRANSPORTATION.**—Section  
**20 102(c)(1) of title 49, United States Code, is amended—**

**21 (1) in the matter preceding subparagraph (A),**  
**22 by striking “6” and inserting “7”; and**

**23 (2) in subparagraph (A), by inserting “Assist-**  
**24 ant Secretary for Commercial Space Transpor-**

1       tation,” after “Assistant Secretary for Research and  
2       Technology,”.

3   **SEC. 102. USE OF EXISTING AUTHORITIES.**

4       (a) SENSE OF CONGRESS.—It is the sense of Con-  
5   gress that the Secretary of Transportation should make  
6   use of existing authorities, including waivers and safety  
7   approvals, as appropriate, to protect the public, make  
8   more efficient use of resources, reduce the regulatory bur-  
9   den for an applicant for a commercial space launch or re-  
10   entry license or experimental permit, and promote com-  
11   mercial space launch and reentry.

12       (b) LICENSE APPLICATIONS AND REQUIREMENTS.—  
13   Section 50905 of title 51, United States Code, is amend-  
14   ed—

15               (1) in subsection (a)—

16                       (A) by amending paragraph (1) to read as  
17               follows:

18               “(1) IN GENERAL.—

19                       “(A) APPLICATIONS.—A person may apply  
20               to the Secretary of Transportation for a license  
21               or transfer of a license under this chapter in  
22               the form and way the Secretary prescribes.

23                       “(B) DECISIONS.—Consistent with the  
24               public health and safety, safety of property, and  
25               national security and foreign policy interests of

1 the United States, the Secretary, not later than  
2 the applicable deadline described in subpara-  
3 graph (C), shall issue or transfer a license if  
4 the Secretary decides in writing that the appli-  
5 cant complies, and will continue to comply, with  
6 this chapter and regulations prescribed under  
7 this chapter.

8 “(C) **APPLICABLE DEADLINE.**—The appli-  
9 cable deadline described in this subparagraph  
10 shall be—

11 “(i) for an applicant that was or is a  
12 holder of any license under this chapter,  
13 not later than 90 days after accepting an  
14 application in accordance with criteria es-  
15 tablished pursuant to subsection (b)(2)(E);  
16 and

17 “(ii) for a new applicant, not later  
18 than 180 days after accepting an applica-  
19 tion in accordance with criteria established  
20 pursuant to subsection (b)(2)(E).

21 “(D) **NOTICE TO APPLICANTS.**—The Sec-  
22 retary shall inform the applicant of any pending  
23 issue and action required to resolve the issue if  
24 the Secretary has not made a decision not later  
25 than—

1           “(i) for an applicant described in sub-  
2           paragraph (C)(i), 60 days after accepting  
3           an application in accordance with criteria  
4           established pursuant to subsection  
5           (b)(2)(E); and

6           “(ii) for an applicant described in sub-  
7           paragraph (C)(ii), 120 days after accepting  
8           an application in accordance with criteria  
9           established pursuant to subsection  
10          (b)(2)(E).

11          “(E) NOTICE TO CONGRESS.—The Sec-  
12          retary shall transmit to the Committee on Com-  
13          merce, Science, and Transportation of the Sen-  
14          ate and the Committee on Science, Space, and  
15          Technology of the House of Representatives a  
16          written notice not later than 30 days after any  
17          occurrence when the Secretary has not taken  
18          action on a license application within an appli-  
19          cable deadline established by this subsection.”;  
20          and

21          (B) in paragraph (2)—

22                 (i) by inserting “PROCEDURES FOR  
23                 SAFETY APPROVALS.—” before “In car-  
24                 rying out”;

1 (ii) by inserting “software,” after  
2 “services,”; and

3 (iii) by adding at the end the fol-  
4 lowing: “Such safety approvals may be  
5 issued simultaneously with a license under  
6 this chapter.”; and

7 (2) by adding at the end the following:

8 “(c) USE OF EXISTING AUTHORITIES.—

9 “(1) IN GENERAL.—The Secretary shall use ex-  
10 isting authorities, including waivers and safety ap-  
11 provals, as appropriate, to make more efficient use  
12 of resources, reduce the regulatory burden for an ap-  
13 plicant under this section, and promote commercial  
14 space launch and reentry.

15 “(2) EXPEDITING SAFETY APPROVALS.—The  
16 Secretary shall expedite the processing of safety ap-  
17 provals that would reduce risks to health or safety  
18 during launch and reentry.”.

19 (e) RESTRICTIONS ON LAUNCHES, OPERATIONS, AND  
20 REENTRIES.—Section 50904 of title 51, United States  
21 Code, is amended by adding at the end the following:

22 “(c) MULTIPLE SITES.—The Secretary may issue a  
23 single license or permit for an operator to conduct launch  
24 services and reentry services at multiple launch sites or  
25 reentry sites.”.

1 **SEC. 103. EXPERIMENTAL PERMITS.**

2 Section 50906 of title 51, United States Code, is  
3 amended by adding at the end the following:

4 “(j) **USE OF EXISTING AUTHORITIES.**—

5 “(1) **IN GENERAL.**—The Secretary shall use ex-  
6 isting authorities, including waivers and safety ap-  
7 provals, as appropriate, to make more efficient use  
8 of resources, reduce the regulatory burden for an ap-  
9 plicant under this section, and promote commercial  
10 space launch and reentry.

11 “(2) **EXPEDITING SAFETY APPROVALS.**—The  
12 Secretary shall expedite the processing of safety ap-  
13 provals that would reduce risks to health or safety  
14 during launch and reentry.”

15 **SEC. 104. SPACE-RELATED ADVISORY RULEMAKING COM-**  
16 **MITTEES.**

17 Section 50903 of title 51, United States Code, is  
18 amended by adding at the end the following:

19 “(c) **FACA.**—The Federal Advisory Committee Act  
20 (5 U.S.C. App.) does not apply to such space-related rule-  
21 making committees under the Secretary’s jurisdiction as  
22 the Secretary shall designate.”

23 **SEC. 105. GOVERNMENT-DEVELOPED SPACE TECHNOLOGY.**

24 Section 50901(b)(2)(B) of title 51, United States  
25 Code, is amended by striking “and encouraging”.

1 **SEC. 106. REGULATORY REFORM.**

2 (a) **DEFINITIONS.**—The definitions set forth in sec-  
3 tion 50902 of title 51, United States Code, shall apply  
4 to this section.

5 (b) **FINDINGS.**—Congress finds that the commercial  
6 space launch regulatory environment has at times impeded  
7 the United States commercial space launch sector in its  
8 innovation of launch technologies, reusable launch and re-  
9 entry vehicles, and other areas related to commercial  
10 launches and reentries.

11 (c) **REGULATORY IMPROVEMENTS FOR COMMERCIAL**  
12 **SPACE LAUNCH ACTIVITIES.**—

13 (1) **IN GENERAL.**—Not later than February 1,  
14 2019, the Secretary of Transportation shall issue a  
15 notice of proposed rulemaking to revise any regula-  
16 tions under chapter 509, United States Code, as the  
17 Secretary considers necessary to meet the objective  
18 of this section.

19 (2) **OBJECTIVE.**—The objective of this section  
20 is to establish, consistent with the purposes de-  
21 scribed in section 50901(b) of title 51, United States  
22 Code, a regulatory regime for commercial space  
23 launch activities under chapter 509 that—

24 (A) creates, to the extent practicable, re-  
25 quirements applicable both to expendable

1 launch and reentry vehicles and to reusable  
2 launch and reentry vehicles;

3 (B) is neutral with regard to the specific  
4 technology utilized in a launch, a reentry, or an  
5 associated safety system;

6 (C) protects the health and safety of the  
7 public;

8 (D) establishes clear, high-level perform-  
9 ance requirements;

10 (E) encourages voluntary, industry tech-  
11 nical standards that complement the high-level  
12 performance requirements established under  
13 subparagraph (D); and

14 (F) facilitates and encourages appropriate  
15 collaboration between the commercial space  
16 launch and reentry sector and the Department  
17 of Transportation with respect to the require-  
18 ments under subparagraph (D) and the stand-  
19 ards under subparagraph (E).

20 (d) CONSULTATION.—In revising the regulations  
21 under subsection (c), the Secretary of Transportation shall  
22 consult with the following:

23 (1) Secretary of Defense.

24 (2) Administrator of NASA.

1           (3) Such members of the commercial space  
2       launch and reentry sector as the Secretary of Trans-  
3       portation considers appropriate to ensure adequate  
4       representation across industry.

5       (e) REPORT.—

6           (1) IN GENERAL.—Not later than 60 days after  
7       the date of enactment of this Act, the Secretary of  
8       Transportation, in consultation with the persons de-  
9       scribed in subsection (d), shall submit to the Com-  
10      mittee on Commerce, Science, and Transportation of  
11      the Senate and the Committee on Science, Space,  
12      and Technology and the Committee on Transpor-  
13      tation and Infrastructure of the House of Represent-  
14      atives a report on the progress in carrying out this  
15      section.

16          (2) CONTENTS.—The report shall include—

17               (A) milestones and a schedule to meet the  
18               objective of this section;

19               (B) a description of any Federal agency re-  
20               sources necessary to meet the objective of this  
21               section;

22               (C) recommendations for legislation that  
23               would expedite or improve the outcomes under  
24               subsection (c); and

1 (D) a plan for ongoing consultation with  
2 the persons described in subsection (d).

3 **SEC. 107. SECRETARY OF TRANSPORTATION OVERSIGHT**  
4 **AND COORDINATION OF COMMERCIAL**  
5 **LAUNCH AND REENTRY OPERATIONS.**

6 (a) OVERSIGHT AND COORDINATION:—

7 (1) IN GENERAL.—The Secretary of Transpor-  
8 tation, in accordance with the findings under section  
9 1617 of the National Defense Authorization Act for  
10 Fiscal Year 2016 (51 U.S.C. 50918 note) and sub-  
11 ject to section 50905(b)(2)(C) of title 51, United  
12 States Code, shall take such action as may be nec-  
13 essary to consolidate or modify the requirements  
14 across Federal agencies identified in section  
15 1617(c)(1)(A) of that Act into a single application  
16 set that satisfies those requirements and expedites  
17 the coordination of commercial launch and reentry  
18 services.

19 (2) CHAPTER 509.—

20 (A) PURPOSES.—Section 50901 of title 51,  
21 United States Code, is amended by inserting  
22 “all” before “commercial launch and reentry  
23 operations”.

1           (13)   GENERAL    AUTHORITY.—Section  
2           50903(b) of title 51, United States Code, is  
3           amended—

4                   (i) by redesignating paragraphs (1)  
5                   and (2) as paragraphs (3) and (4), respec-  
6                   tively; and

7                   (ii) by inserting before paragraph (3),  
8                   as redesignated, the following:

9           “(1) consistent with this chapter, authorize, li-  
10          cense, and oversee the conduct of all commercial  
11          launch and reentry operations, including any com-  
12          mercial launch or commercial reentry at a Federal  
13          range;

14          “(2) if an application for a license or permit  
15          under this chapter includes launch or reentry at a  
16          Defense range, coordinate with the Secretary of De-  
17          fense, or designee, to protect any national security  
18          interest relevant to such activity, including any nec-  
19          essary mitigation measure to protect Department of  
20          Defense property and personnel;”.

21          (3) EFFECTIVE DATE.—This subsection takes  
22          effect on the date the final rule under section 107(c)  
23          of this Act is published in the Federal Register.

1 (b) RULES OF CONSTRUCTION.—Nothing in this Act,  
2 or the amendments made by this Act, may be construed  
3 to affect—

4 (1) section 1617 of the National Defense Au-  
5 thorization Act for Fiscal Year 2016 (51 U.S.C.  
6 50918 note); or

7 (2) the authority of the Secretary of Defense as  
8 it relates to safety and security related to launch or  
9 reentry at a Defense range.

10 (c) TECHNICAL AMENDMENT; REPEAL REDUNDANT  
11 LAW.—Section 113 of the U.S. Commercial Space Launch  
12 Competitiveness Act (Public Law 114–90; 129 Stat. 704)  
13 and the item relating to that section in the table of con-  
14 tents under section 1(b) of that Act are repealed.

15 **SEC. 108. STUDY ON JOINT USE OF SPACEPORTS.**

16 (a) IN GENERAL.—Not later than 180 days after the  
17 date of enactment of this Act—

18 (1) the Secretary of Transportation shall, in  
19 consultation with the Secretary of Defense, conduct  
20 a study of the current process the Government uses  
21 to provide or permit the joint use of United States  
22 military installations for licensed nongovernmental  
23 space launch and reentry activities, space-related ac-  
24 tivities, and space transportation services by United  
25 States commercial providers; and

1           (2) submit the results of the study to the Com-  
2       mittee on Commerce, Science, and Transportation  
3       and the Committee on Armed Services of the Senate  
4       and the Committee on Science, Space, and Tech-  
5       nology and the Committee on Armed Services of the  
6       House of Representatives.

7       (b) CONSIDERATIONS.—In conducting the study re-  
8       quired by subsection (a), the Secretary of Transportation  
9       shall consider the following:

10           (1) Improvements that could be made to the  
11       current process the Government uses to provide or  
12       permit the joint use of United States military instal-  
13       lations for licensed nongovernmental space launch  
14       and reentry activities, space-related activities, and  
15       space transportation services by United States com-  
16       mercial providers.

17           (2) Means to facilitate the ability for a military  
18       installation to request that the Secretary of Trans-  
19       portation consider the military installation as a site  
20       to provide or permit the licensed nongovernmental  
21       space launch and reentry activities, space-related ac-  
22       tivities, and space transportation services by United  
23       States commercial providers.

24           (3) The feasibility of increasing the number of  
25       military installations that provide or are permitted

1 to be utilized for licensed nongovernmental space  
2 launch and reentry activities, space-related activities,  
3 and space transportation services by United States  
4 commercial providers.

5 (4) The importance of the use of safety approv-  
6 als of launch vehicles, reentry vehicles, space trans-  
7 portation vehicles, safety systems, processes, serv-  
8 ices, or personnel (including approval procedures for  
9 the purpose of protecting the health and safety of  
10 crew, Government astronauts, and space flight par-  
11 ticipants), to the extent permitted that may be used  
12 in conducting licensed commercial space launch, re-  
13 entry activities, and space transportation services at  
14 installations.

15 **SEC. 109. AIRSPACE INTEGRATION REPORT.**

16 (a) IN GENERAL.—Not later than 90 days after the  
17 date of enactment of this Act, the Secretary of Transpor-  
18 tation shall—

19 (1) identify and review the current policies and  
20 tools used to integrate launch and reentry (as those  
21 terms are defined in section 50902 of title 51,  
22 United States Code) into the national airspace sys-  
23 tem;

24 (2) consider whether the policies and tools iden-  
25 tified in paragraph (1) need to be updated to more

1 efficiently and safely manage the national airspace  
2 system; and

3 (3) submit to the appropriate committees of  
4 Congress a report on the findings under paragraphs  
5 (1) and (2), including recommendations for how to  
6 more efficiently and safely manage the national air-  
7 space system.

8 (b) CONSULTATION.—In conducting the review under  
9 subsection (a), the Secretary shall consult with such mem-  
10 bers of the commercial space launch and reentry sector  
11 and commercial aviation sector as the Secretary considers  
12 appropriate to ensure adequate representation across  
13 those industries.

14 (c) DEFINITION OF APPROPRIATE COMMITTEES OF  
15 CONGRESS.—In this section, the term “appropriate com-  
16 mittees of Congress” means—

17 (1) the Committee on Commerce, Science, and  
18 Transportation of the Senate;

19 (2) the Committee on Science, Space, and  
20 Technology of the House of Representatives; and

21 (3) the Committee on Transportation and In-  
22 frastructure of the House of Representatives.

1 **TITLE II—STREAMLINING OVER-**  
2 **SIGHT OF NONGOVERN-**  
3 **MENTAL EARTH OBSERVA-**  
4 **TION ACTIVITIES**

5 **SEC. 201. NONGOVERNMENTAL EARTH OBSERVATION AC-**  
6 **TIVITIES.**

7 (a) LICENSING OF NONGOVERNMENTAL EARTH OB-  
8 SERVATION ACTIVITIES.—Chapter 601 of title 51, United  
9 States Code, is amended—

10 (1) in section 60101—

11 (A) by amending paragraph (12) to read  
12 as follows:

13 “(12) UNENHANCED DATA.—The term  
14 ‘unenhanced data’ means signals or imagery prod-  
15 ucts from Earth observation activities that are un-  
16 processed or subject only to data preprocessing.”;

17 (B) by redesignating paragraphs (12) and  
18 (13) as paragraphs (18) and (19), respectively;

19 (C) by redesignating paragraph (11) as  
20 paragraph (15);

21 (D) by redesignating paragraphs (4)  
22 through (10) as paragraphs (5) through (11),  
23 respectively;

24 (E) by inserting after paragraph (3), the  
25 following:

1           “(4) EARTH OBSERVATION ACTIVITY.—The  
2       term ‘Earth observation activity’ means a space ac-  
3       tivity the primary purpose of which is to collect data  
4       that can be processed into imagery of the Earth or  
5       of man-made objects orbiting the Earth.”;

6           (F) by inserting after paragraph (11), as  
7       redesignated, the following:

8           “(12) NONGOVERNMENTAL EARTH OBSERVA-  
9       TION ACTIVITY.—The term ‘nongovernmental Earth  
10      observation activity’ means an Earth observation ac-  
11     tivity of a person other than—

12           “(A) the United States Government; or

13           “(B) a Government contractor or subcon-  
14      tractor if the Government contractor or subcon-  
15      tractor is performing the activity for the Gov-  
16      ernment.

17           “(13) ORBITAL DEBRIS.—The term ‘orbital de-  
18      bris’ means any space object that is placed in space  
19      or derives from a space object placed in space by a  
20      person, remains in orbit, and no longer serves any  
21      useful function or purpose.

22           “(14) PERSON.—The term ‘person’ means a  
23      person (as defined in section 1 of title 1) subject to  
24      the jurisdiction or control of the United States.”;  
25      and

1 (G) by inserting after paragraph (15), as  
2 redesignated, the following:

3 “(16) SPACE ACTIVITY.—

4 “(A) IN GENERAL.—The term ‘space activ-  
5 ity’ means any activity that is conducted in  
6 space.

7 “(B) INCLUSIONS.—The term ‘space activ-  
8 ity’ includes any activity conducted on a celes-  
9 tial body, including the Moon.

10 “(C) EXCLUSIONS.—The term ‘space activ-  
11 ity’ does not include any activity that is con-  
12 ducted entirely on board or within a space ob-  
13 ject and does not affect another space object.

14 “(17) SPACE OBJECT.—The term ‘space object’  
15 means any object, including any component of that  
16 object, that is launched into space or constructed in  
17 space, including any object landed or constructed on  
18 a celestial body, including the Moon.”;

19 (2) by amending subchapter III to read as fol-  
20 lows:

21 “SUBCHAPTER III—AUTHORIZATION OF NON-  
22 GOVERNMENTAL EARTH OBSERVATION AC-  
23 TIVITIES

24 “§ 60121. Purposes

25 “The purposes of this subchapter are—

1           “(1) to prevent, to the extent practicable, harm-  
2       ful interference to space activities by nongovern-  
3       mental Earth observation activities;

4           “(2) to manage risk and prevent harm to  
5       United States national security;

6           “(3) to ensure consistency with international  
7       obligations of the United States; and

8           “(4) to promote the leadership, industrial inno-  
9       vation, and international competitiveness of the  
10      United States.

11   **“§ 60122. General authority**

12       “(a) IN GENERAL.—The Secretary shall carry out  
13      this subchapter.

14       “(b) FUNCTIONS.—In carrying out this subchapter,  
15      the Secretary shall consult with—

16           “(1) the Secretary of Defense;

17           “(2) the Director of National Intelligence; and

18           “(3) the head of such other Federal department  
19      or agency as the Secretary considers necessary.

20   **“§ 60123. Administrative authority of Secretary**

21       “(a) FUNCTIONS.—In order to carry out the respon-  
22      sibilities specified in this subchapter, the Secretary may—

23           “(1) grant, condition, or transfer licenses under  
24      this chapter;

1           “(2) seek an order of injunction or similar judi-  
2       cial determination from a district court of the  
3       United States with personal jurisdiction over the li-  
4       censee to terminate, modify, or suspend licenses  
5       under this subchapter and to terminate licensed op-  
6       erations on an immediate basis, if the Secretary de-  
7       termines that the licensee has substantially failed to  
8       comply with any provisions of this chapter, with any  
9       terms, conditions, or restrictions of such license, or  
10      with any international obligations or national secu-  
11      rity concerns of the United States;

12          “(3) provide penalties for noncompliance with  
13      the requirements of licenses or regulations issued  
14      under this subchapter, including civil penalties not  
15      to exceed \$10,000 (each day of operation in violation  
16      of such licenses or regulations constituting a sepa-  
17      rate violation);

18          “(4) compromise, modify, or remit any such  
19      civil penalty;

20          “(5) issue subpoenas for any materials, docu-  
21      ments, or records, or for the attendance and testi-  
22      mony of witnesses for the purpose of conducting a  
23      hearing under this section;

24          “(6) seize any object, record, or report pursuant  
25      to a warrant from a magistrate based on a showing

1 of probable cause to believe that such object, record,  
 2 or report was used, is being used, or is likely to be  
 3 used in violation of this chapter or the requirements  
 4 of a license or regulation issued thereunder; and

5 “(7) make investigations and inquiries and ad-  
 6 minister to or take from any person an oath, affir-  
 7 mation, or affidavit concerning any matter relating  
 8 to the enforcement of this chapter.

9 “(b) REVIEW OF AGENCY ACTION.—Any applicant or  
 10 licensee that makes a timely request for review of an ad-  
 11 verse action pursuant to paragraph (1), (3), (5), or (6)  
 12 of subsection (a) shall be entitled to adjudication by the  
 13 Secretary on the record after an opportunity for any agen-  
 14 cy hearing with respect to such adverse action. Any final  
 15 action by the Secretary under this subsection shall be sub-  
 16 ject to judicial review under chapter 7 of title 5.

17 **“§ 60124. Authorization to conduct nongovernmental**  
 18 **Earth observation activities**

19 “(a) REQUIREMENT.—No person may conduct any  
 20 nongovernmental Earth observation activity without an  
 21 authorization issued under this subchapter.

22 “(b) WAIVERS.—

23 “(1) IN GENERAL.—The Secretary, in consulta-  
 24 tion with the Secretary of Defense <sup>the Director of National Intelligence,</sup> and the head of  
 25 such other Federal agency as the Secretary con-

1       siders appropriate, may waive a requirement under  
2       this subchapter for a nongovernmental Earth obser-  
3       vation activity, or for a type or class of nongovern-  
4       mental Earth observation activities, if the Secretary  
5       decides that granting a waiver is consistent with sec-  
6       tion 60121.

7       “(2) STANDARDS.—Not later than 120 days  
8       after the date of enactment of the Space Frontier  
9       Act of 2019, the Secretary shall establish standards,  
10      in consultation with the Secretary of Defense and  
11      the head of such other Federal agency as the Sec-  
12      retary considers appropriate, for determining de-  
13      minimis Earth observation activities that would be  
14      eligible for a waiver under paragraph (1).

15      “(c) COVERAGE OF AUTHORIZATION.—The Secretary  
16      shall, to the maximum extent practicable, require a single  
17      authorization for a person—

18             “(1) to conduct multiple Earth observation ac-  
19             tivities using a single space object;

20             “(2) to operate multiple space objects carrying  
21             out substantially similar Earth observation activities;  
22             or

23             “(3) to use multiple space objects to carry out  
24             a single Earth observation activity.

25      “(d) APPLICATION.—

1           “(1) IN GENERAL.—A person seeking an au-  
2           thorization under this subchapter shall submit an  
3           application to the Secretary at such time, in such  
4           manner, and containing such information as the Sec-  
5           retary may require for the purposes described in sec-  
6           tion 60121, including—

7                   “(A) a description of the proposed Earth  
8                   observation activity, including—

9                           “(i) a physical and functional descrip-  
10                          tion of each space object;

11                          “(ii) the orbital characteristics of each  
12                          space object, including altitude, inclination,  
13                          orbital period, and estimated operational  
14                          lifetime; and

15                          “(iii) a list of the names of all persons  
16                          that have or will have direct operational or  
17                          financial control of the Earth observation  
18                          activity;

19                   “(B) a plan to prevent orbital debris con-  
20                   sistent with the 2001 United States Orbital De-  
21                   bris Mitigation Standard Practices or any sub-  
22                   sequent revision thereof; and

23                   “(C) a description of the capabilities of  
24                   each instrument to be used to observe the

1 Earth in the conduct of the Earth observation  
2 activity:

3 “(2) APPLICATION STATUS.—Not later than 14  
4 days after the date of receipt of an application, the  
5 Secretary shall make a determination whether the  
6 application is complete or incomplete and notify the  
7 applicant of that determination, including, if incom-  
8 plete, the reason the application is incomplete.

9 “(c) REVIEW.—

10 “(1) IN GENERAL.—Not later than 90 days  
11 after the date that the Secretary makes a determina-  
12 tion under subsection (d)(2) that an application is  
13 complete, the Secretary shall review all information  
14 provided in that application and, subject to the pro-  
15 visions of this subsection, notify the applicant in  
16 writing whether the application was approved, with  
17 or without conditions, or denied.

18 “(2) APPROVALS.—The Secretary shall approve  
19 an application under this subsection if the Secretary  
20 determines that—

21 “(A) the Earth observation activity is con-  
22 sistent with the purposes described in section  
23 60121; and

1           “(B) the applicant is in compliance, and  
2           will continue to comply, with this subchapter,  
3           including regulations.

4           “(3) DENIALS.—

5           “(A) IN GENERAL.—If an application  
6           under this subsection is denied, the Secretary—

7                   “(i) shall include in the notification  
8                   under paragraph (1)—

9                           “(I) a reason for the denial; and

10                           “(II) a description of each defi-  
11                           ciency, including guidance on how to  
12                           correct the deficiency;

13                   “(ii) shall sign the notification under  
14                   paragraph (1);

15                   “(iii) may not delegate the duty under  
16                   clause (ii); and

17                   “(iv) shall submit to the Committee  
18                   on Commerce, Science, and Transportation  
19                   of the Senate and the Committee on  
20                   Science, Space, and Technology of the  
21                   House of Representatives a copy of the no-  
22                   tification.

23           “(B) INTERAGENCY REVIEW.—Not later  
24           than 3 days after the date that the Secretary  
25           makes a determination under subsection (d)(2)

1           that an application is complete, the Secretary  
2           shall consult with the head of each Federal de-  
3           partment and agency described in section  
4           60122(b) and if any head of such Federal de-  
5           partment or agency does not support approving  
6           the application—

7                   “(i) that head of another Federal de-  
8                   partment or agency—

9                           “(I) not later than 60 days after  
10                          the date of the consultation, shall no-  
11                          tify the Secretary, in writing, of the  
12                          reason for withholding support, in-  
13                          cluding a description of each defi-  
14                          ciency and guidance on how to correct  
15                          the deficiency;

16                          “(II) shall sign the notification  
17                          under subclause (I); and

18                          “(III) may not delegate the duty  
19                          under subclause (II), except the Sec-  
20                          retary of Defense may delegate the  
21                          duty under subclause (II) to an Under  
22                          Secretary of Defense; and

23                          “(ii) subject to all applicable laws, the  
24                          Secretary shall include the notification  
25                          under clause (i) in the notification under

1 paragraph (1), including classified infor-  
2 mation if—

3 “(I) the Secretary of Defense or  
4 Director of National Intelligence, as  
5 appropriate, determines that disclo-  
6 sure of the classified information is  
7 appropriate; and

8 “(II) the applicant has the re-  
9 quired security clearance for that clas-  
10 sified information.

11 “(C) INTERAGENCY ASSENTS.—If the head  
12 of another Federal department or agency does  
13 not notify the Secretary under subparagraph  
14 (B)(i)(I) within the time specified in that sub-  
15 paragraph, that head of another Federal de-  
16 partment or agency shall be deemed to have as-  
17 sented to the application.

18 “(D) INTERAGENCY DISSENTS.—If, during  
19 the review of an application under paragraph  
20 (1), a head of a Federal department or agency  
21 described in subparagraph (B) disagrees with  
22 the Secretary or the head of another Federal  
23 department or agency described in subpara-  
24 graph (B) with respect to a deficiency under  
25 this subsection, the Secretary shall submit the

1 matter to the President, who shall resolve the  
2 dispute before the applicable deadline under  
3 paragraph (1).

4 “(E) DEFICIENCIES.—The Secretary  
5 shall—

6 “(i) provide each applicant under this  
7 paragraph with a reasonable opportunity—

8 “(I) to correct each deficiency  
9 identified under subparagraph  
10 (A)(i)(II); and

11 “(II) to resubmit a corrected ap-  
12 plication for reconsideration; and

13 “(ii) not later than 30 days after the  
14 date of receipt of a corrected application  
15 under clause (i)(II), make a determination  
16 whether to approve the application or not,  
17 in consultation with—

18 “(I) each head of another Fed-  
19 eral department or agency that sub-  
20 mitted a notification under subpara-  
21 graph (B); and

22 “(II) the head of such other Fed-  
23 eral department or agency as the Sec-  
24 retary considers necessary.

25 “(F) IMPROPER BASIS FOR DENIAL.—

1           “(i) COMPETITION.—The Secretary  
2 shall not deny an application under this  
3 subsection in order to protect any existing  
4 Earth observation activity from competi-  
5 tion.

6           “(ii) CAPABILITIES.—The Secretary  
7 shall not, to the maximum extent prac-  
8 ticable, deny an application under this sub-  
9 section based solely on the capabilities of  
10 the Earth observation activity if those ca-  
11 pabilities—

12               “(I) are commercially available;  
13               or

14               “(II) are reasonably expected to  
15 be made commercially available, not  
16 later than 3 years after the date of  
17 the application, in the international or  
18 domestic marketplace.

19           “(iii) APPLICABILITY.—The prohibi-  
20 tion under clause (ii)(II) shall apply wheth-  
21 er the marketplace products and services  
22 originate from the operation of aircraft,  
23 uncrewed aircraft, or other platforms or  
24 technical means or are assimilated from a  
25 variety of data sources.

1           “(4) DEADLINE.—If the Secretary does not no-  
2       tify an applicant in writing before the applicable  
3       deadline under paragraph (1), the Secretary shall,  
4       not later than 1 business day after the date of the  
5       applicable deadline, notify the Committee on Com-  
6       merce, Science, and Transportation of the Senate  
7       and the Committee on Science, Space, and Tech-  
8       nology of the House of Representatives of the status  
9       of the application, including the reason the deadline  
10      was not met.

11          “(5) EXPEDITED REVIEW PROCESS.—Subject to  
12      paragraph (2) of this section and section 60122(b),  
13      the Secretary may modify the requirements under  
14      this subsection, as the Secretary considers appro-  
15      priate, to expedite the review of an application that  
16      seeks to conduct an Earth observation activity that  
17      is substantially similar to an Earth observation ac-  
18      tivity already licensed under this subchapter.

19          “(f) ADDITIONAL REQUIREMENTS.—An authoriza-  
20      tion issued under this subchapter shall require the author-  
21      ized person—

22           “(1) to be in compliance with this subchapter;

23           “(2) to notify the Secretary of any significant  
24      change in the information contained in the applica-  
25      tion; and

1           “(3) to make available to the government of  
2     any country, including the United States,  
3     unenanced data collected by the Earth observation  
4     system concerning the territory under the jurisdic-  
5     tion of that government as soon as such data are  
6     available and on reasonable commercial terms and  
7     conditions.

8     “(g) PROHIBITION ON RETROACTIVE CONDITIONS.—

9           “(1) IN GENERAL.—Except as provided in para-  
10    graph (3), the Secretary may not modify any condi-  
11    tion on, or add any condition to, an authorization  
12    under this subchapter after the date of the author-  
13    ization.

14          “(2) RULE OF CONSTRUCTION.—Nothing in  
15    this section shall be construed to prohibit the Sec-  
16    retary from removing a condition on an authoriza-  
17    tion under this subchapter.

18          “(3) INTERAGENCY REVIEW.—

19           “(A) IN GENERAL.—Subject to subpara-  
20    graphs (B) and (E), the Secretary or the head  
21    of a Federal department or agency described in  
22    section 60122(b) may, without delegation, pro-  
23    pose the modification or addition of a condition  
24    to an authorization under this subchapter after  
25    the date of the authorization.

1           “(B) CONSULTATION REQUIREMENT.—

2           Prior to making the modification or addition  
3           under subparagraph (A), the Secretary or the  
4           applicable head of the Federal department or  
5           agency shall consult with the head of each of  
6           the other Federal departments and agencies de-  
7           scribed in section 60122(b) and if any head of  
8           such Federal department or agency does not  
9           support such modification or addition that head  
10          of another Federal department or agency—

11                 “(i) not later than 60 days after the  
12                 date of the consultation, shall notify the  
13                 Secretary, in writing, of the reason for  
14                 withholding support;

15                 “(ii) shall sign the notification under  
16                 clause (i); and

17                 “(iii) may not delegate the duty under  
18                 clause (ii).

19           “(C) INTERAGENCY ASSENTS.—If the head  
20           of another Federal department or agency does  
21           not notify the Secretary under subparagraph  
22           (B)(i) within the time specified in that subpara-  
23           graph, that head of another Federal department  
24           or agency shall be deemed to have assented to

1 the modification or addition under subpara-  
2 graph (A).

3 “(D) INTERAGENCY DISSENTS.—If the  
4 head of a Federal department or agency de-  
5 scribed in subparagraph (A) disagrees with the  
6 Secretary or the head of another Federal de-  
7 partment or agency described in subparagraph  
8 (A) with respect to such modification or addi-  
9 tion under this paragraph, the Secretary shall  
10 submit the matter to the President, who shall  
11 resolve the dispute.

12 “(E) NOTICE.—Prior to making a modi-  
13 fication or addition under subparagraph (A),  
14 the Secretary or the head of the Federal de-  
15 partment or agency, as applicable, shall—

16 “(i) provide notice to the licensee of  
17 the reason for the proposed modification or  
18 addition, including, if applicable, a descrip-  
19 tion of any deficiency and guidance on how  
20 to correct the deficiency; and

21 “(ii) provide the licensee a reasonable  
22 opportunity to correct a deficiency identi-  
23 fied in clause (i).

1 **“§ 60125. Annual reports**

2 “(a) IN GENERAL.—Not later than 180 days after  
3 the date of enactment of the Space Frontier Act of 2019,  
4 and annually thereafter, the Secretary shall submit to the  
5 Committee on Commerce, Science, and Transportation of  
6 the Senate and the Committee on Science, Space, and  
7 Technology of the House of Representatives a report on  
8 the progress in implementing this subchapter, including—

9 “(1) a list of all applications received or pend-  
10 ing in the previous calendar year and the status of  
11 each such application;

12 “(2) notwithstanding paragraph (4) of section  
13 60124(c), a list of all applications, in the previous  
14 calendar year, for which the Secretary missed the  
15 deadline under paragraph (1) of that section, includ-  
16 ing the reasons the deadline was not met; and

17 “(3) a description of all actions taken by the  
18 Secretary under the administrative authority grant-  
19 ed under section 60123.

20 “(b) CLASSIFIED ANNEXES.—Each report under sub-  
21 section (a) may include classified annexes as necessary to  
22 protect the disclosure of sensitive or classified information.

23 “(c) CESSATION OF EFFECTIVENESS.—This section  
24 ceases to be effective September 30, 2021.

1 **“§ 60126. Regulations**

2 “The Secretary may promulgate regulations to imple-  
3 ment this subchapter.

4 **“§ 60127. Relationship to other executive agencies**  
5 **and laws**

6 “(a) EXECUTIVE AGENCIES.—Except as provided in  
7 this subchapter or chapter 509, or any activity regulated  
8 by the Federal Communications Commission under the  
9 Communications Act of 1934 (47 U.S.C. 151 et seq.), a  
10 person is not required to obtain from an executive agency  
11 a license, approval, waiver, or exemption to conduct a non-  
12 governmental Earth observation activity.

13 “(b) RULE OF CONSTRUCTION.—This subchapter  
14 does not affect the authority of—

15 “(1) the Federal Communications Commission  
16 under the Communications Act of 1934 (47 U.S.C.  
17 151 et seq.); or

18 “(2) the Secretary of Transportation under  
19 chapter 509 of this title.

20 “(c) NONAPPLICATION.—This subchapter does not  
21 apply to any space activity the United States Government  
22 carries out for the Government.”; and

23 (3) by amending section 60147 to read as fol-  
24 lows:

1 **“§ 60147. Consultation**

2       “(a) CONSULTATION WITH SECRETARY OF DE-  
3 FENSE.—The Landsat Program Management shall con-  
4 sult with the Secretary of Defense on all matters relating  
5 to the Landsat Program under this chapter that affect na-  
6 tional security. The Secretary of Defense shall be respon-  
7 sible for determining those conditions, consistent with this  
8 chapter, necessary to meet national security concerns of  
9 the United States and for notifying the Landsat Program  
10 Management of such conditions.

11       “(b) CONSULTATION WITH SECRETARY OF STATE.—

12       “(1) IN GENERAL.—The Landsat Program  
13 Management shall consult with the Secretary of  
14 State on all matters relating to the Landsat Pro-  
15 gram under this chapter that affect international ob-  
16 ligations. The Secretary of State shall be responsible  
17 for determining those conditions, consistent with this  
18 chapter, necessary to meet international obligations  
19 and policies of the United States and for notifying  
20 the Landsat Program Management of such condi-  
21 tions.

22       “(2) INTERNATIONAL AID.—Appropriate United  
23 States Government agencies are authorized and en-  
24 couraged to provide remote sensing data, technology,  
25 and training to developing nations as a component  
26 of programs of international aid.

1           “(3) REPORTING DISCRIMINATORY DISTRIBUTION.—The Secretary of State shall promptly report  
2           to the Landsat Program Management any instances  
3           outside the United States of discriminatory distribu-  
4           tion of Landsat data.  
5

6           “(c) STATUS REPORT.—The Landsat Program Man-  
7           agement shall, as often as necessary, provide to Congress  
8           complete and updated information about the status of on-  
9           going operations of the Landsat system, including timely  
10          notification of decisions made with respect to the Landsat  
11          system in order to meet national security concerns and  
12          international obligations and policies of the United States  
13          Government.”.

14          (b) TABLE OF CONTENTS.—The table of contents of  
15          chapter 601 of title 51, United States Code, is amended  
16          by striking the items relating to subchapter III and insert-  
17          ing the following:

“SUBCHAPTER III—AUTHORIZATION OF NONGOVERNMENTAL EARTH  
OBSERVATION ACTIVITIES

“60121. Purposes.

“60122. General authority.

“60123. Administrative authority of Secretary.

“60124. Authorization to conduct nongovernmental Earth observation activities.

“60125. Annual reports.

“60126. Regulations.

“60127. Relationship to other executive agencies and laws.”.

18          (c) RULES OF CONSTRUCTION.—

19               (1) Nothing in this section or the amendments  
20               made by this section shall affect any license, or ap-  
21               plication for a license, to operate a private remote

1       sensing space system that was made under sub-  
2       chapter III of chapter 601 of title 51, United States  
3       Code (as in effect before the date of enactment of  
4       this Act), before the date of enactment of this Act.  
5       Such license shall continue to be subject to the re-  
6       quirements to which such license was subject under  
7       that chapter as in effect on the day before the date  
8       of enactment of this Act.

9           (2) Nothing in this section or the amendments  
10       made by this section shall affect the prohibition on  
11       the collection and release of detailed satellite im-  
12       agery relating to Israel under section 1064 of the  
13       National Defense Authorization Act for Fiscal Year  
14       1997 (51 U.S.C. 60121 note).

15   **SEC. 202. RADIO-FREQUENCY MAPPING REPORT.**

16       (a) **IN GENERAL.**—Not later than 180 days after the  
17       date of enactment of this Act, the Secretary of Commerce,  
18       in consultation with the Secretary of Defense and the Di-  
19       rector of National Intelligence, shall complete and submit  
20       a report on space-based radio-frequency mapping to—

21           (1) the Committee on Commerce, Science, and  
22       Transportation of the Senate;

23           (2) the Select Committee on Intelligence of the  
24       Senate;

1           (3) the Committee on Armed Services of the  
2     Senate;

3           (4) the Committee on Science, Space, and  
4     Technology of the House of Representatives;

5           (5) the Permanent Select Committee on Intel-  
6     ligence of the House of Representatives; and

7           (6) the Committee on Armed Services of the  
8     House of Representatives.

9     (b) CONTENTS.—The report under subsection (a)  
10  shall include—

11           (1) a discussion of whether a need exists to reg-  
12     ulate space-based radio-frequency mapping;

13           (2) a description of any inmitigable impacts of  
14     space-based radio-frequency mapping on national se-  
15     curity, United States competitiveness and space  
16     leadership, or Constitutional rights;

17           (3) any recommendations for additional regu-  
18     latory action regarding space-based radio-frequency  
19     mapping;

20           (4) a detailed description of the costs and bene-  
21     fits of the recommendations described in paragraph  
22     (3); and

23           (5) an evaluation of—

24                 (A) whether the development of voluntary  
25     consensus industry standards in coordination

1 with the Department of Defense is more appro-  
2 priate than issuing regulations with respect to  
3 space-based radio-frequency mapping; and

4 (B) whether existing law, including regula-  
5 tions and policies, could be applied in a manner  
6 that prevents the need for additional regulation  
7 of space-based radio-frequency mapping.

8 (c) FORM.—The report under subsection (a) shall be  
9 submitted in unclassified form, but may include a classi-  
10 fied annex.

### 11 **TITLE III—MISCELLANEOUS**

#### 12 **SEC. 301. PROMOTING FAIRNESS AND COMPETITIVENESS**

##### 13 **FOR NASA PARTNERSHIP OPPORTUNITIES.**

14 (a) SENSE OF CONGRESS.—It is the sense of Con-  
15 gress that—

16 (1) fair access to available NASA assets and  
17 services on a reimbursable, noninterference, equi-  
18 table, and predictable basis is advantageous in ena-  
19 bling the United States commercial space industry;

20 (2) NASA should continue to promote fairness  
21 to all parties and ensure best value to the Federal  
22 Government in granting use of NASA assets, serv-  
23 ices, and capabilities in a manner that contributes to  
24 NASA's missions and objectives; and

1           (3) NASA should continue to promote small  
2       business awareness and participation through advoca-  
3       cacy and collaborative efforts with internal and ex-  
4       ternal partners, stakeholders, and academia.

5       (b) GUIDANCE FOR SMALL BUSINESS PARTICIPA-  
6       TION.—The Administrator of NASA shall—

7           (1) provide opportunities for the consideration  
8       of small business concerns during public-private  
9       partnership planning processes and in public-private  
10      partnership plans;

11          (2) invite the participation of each relevant di-  
12      rector of an Office of Small and Disadvantaged  
13      Business Utilization under section 15(k) of the  
14      Small Business Act 915 U.S.C. 644(k) in public-pri-  
15      vate partnership planning processes and provide the  
16      director access to public-private partnership plans;

17          (3) not later than 90 days after the date of en-  
18      actment of this Act—

19            (A) identify and establish a list of all  
20      NASA assets, services, and capabilities that are  
21      available, or will be available, for public-private  
22      partnership opportunities; and

23            (B) make the list under subparagraph (A)  
24      available on NASA's website, in a searchable  
25      format;

1           (4) periodically as needed, but not less than  
2       once per year, update the list and website under  
3       paragraph (3); and

4           (5) not later than 180 days after the date of  
5       enactment of this Act, develop a policy and issue  
6       guidance for a consistent, fair, and equitable method  
7       for scheduling and establishing priority of use of the  
8       NASA assets, services, and capabilities identified  
9       under this subsection.

10       (c) **STRENGTHENING SMALL BUSINESS AWARE-**  
11 **NBSS.**—Not later than 180 days after the date of enact-  
12 ment of this Act, the Administrator of NASA shall des-  
13 ignate an official at each NASA Center—

14           (1) to serve as an advocate for small businesses  
15       within the office that manages partnerships at each  
16       Center; and

17           (2) to provide guidance to small businesses on  
18       how to participate in public-private partnership op-  
19       portunities with NASA.

20 **SEC. 302. LEASE OF NON-EXCESS PROPERTY.**

21       Section 20145(g) of title 51, United States Code, is  
22 amended by striking “December 31, 2018” and inserting  
23 “December 31, 2019”.

1 **SEC. 303. MAINTAINING A NATIONAL LABORATORY IN**  
2 **SPACE.**

3 (a) **SENSE OF CONGRESS.**—It is the sense of Con-  
4 gress that—

5 (1) the United States national laboratory in  
6 space, which currently consists of the United States  
7 segment of the ISS (designated a national laboratory  
8 under section 70905 of title 51, United States  
9 Code)—

10 (A) benefits the scientific community and  
11 promotes commerce in space;

12 (B) fosters stronger relationships among  
13 NASA and other Federal agencies, the private  
14 sector, and research groups and universities;

15 (C) advances science, technology, engineer-  
16 ing, and mathematics education through utiliza-  
17 tion of the unique microgravity environment;  
18 and

19 (D) advances human knowledge and inter-  
20 national cooperation;

21 (2) after the ISS is decommissioned, the United  
22 States should maintain a national microgravity lab-  
23 oratory in space;

24 (3) in maintaining a national microgravity lab-  
25 oratory described in paragraph (2), the United  
26 States should make appropriate accommodations for

1 different types of ownership and operational struc-  
2 tures for the ISS and future space stations;

3 (4) the national microgravity laboratory de-  
4 scribed in paragraph (2) should be maintained be-  
5 yond the date that the ISS is decommissioned and,  
6 if possible, in cooperation with international space  
7 partners to the extent practicable; and

8 (5) NASA should continue to support funda-  
9 mental science research on future platforms in low-  
10 Earth orbit and cis-lunar space, short duration sub-  
11 orbital flights, drop towers, and other microgravity  
12 testing environments.

13 (b) REPORT.—The Administrator of NASA shall  
14 produce, in coordination with the National Space Council  
15 and other Federal agencies as the Administrator deems  
16 relevant, a report detailing the feasibility of establishing  
17 a microgravity national laboratory Federally Funded Re-  
18 search and Development Center to undertake the work re-  
19 lated to the study and utilization of in-space conditions.

20 **SEC. 304. PRESENCE IN LOW-EARTH ORBIT.**

21 (a) SENSE OF CONGRESS.—It is the sense of Con-  
22 gress that—

23 (1) it is in the national and economic security  
24 interests of the United States to maintain a contin-  
25 uous human presence in low-Earth orbit; and

1           (2) low-Earth orbit should be utilized as a  
2       testbed to advance human space exploration, sci-  
3       entific discoveries, and United States economic com-  
4       petitiveness and commercial participation.

5       (b) HUMAN PRESENCE REQUIREMENT.—NASA shall  
6       continuously maintain the capability for a continuous  
7       human presence in low-Earth orbit through and beyond  
8       the useful life of the ISS.

9       **SEC. 305. CONTINUATION OF THE ISS.**

10       (a) CONTINUATION OF THE INTERNATIONAL SPACE  
11       STATION.—Section 501(a) of the National Aeronautics  
12       and Space Administration Authorization Act of 2010 (42  
13       U.S.C. 18351(a)) is amended by striking “2024” and in-  
14       serting “2030”.

15       (b) MAINTENANCE OF THE UNITED STATES SEG-  
16       MENT AND ASSURANCE OF CONTINUED OPERATIONS OF  
17       THE INTERNATIONAL SPACE STATION.—Section 503(a) of  
18       the National Aeronautics and Space Administration Au-  
19       thorization Act of 2010 (42 U.S.C. 18353(a)) is amended  
20       by striking “2024” and inserting “2030”.

21       (c) RESEARCH CAPACITY ALLOCATION AND INTE-  
22       GRATION OF RESEARCH PAYLOADS.—Section 504(d) of  
23       the National Aeronautics and Space Administration Au-  
24       thorization Act of 2010 (42 U.S.C. 18354(d)) is amended

1 by striking “2024” each place it appears and inserting  
2 “2030”.

3 (d) MAINTAINING USE THROUGH AT LEAST 2030.—  
4 Section 70907 of title 51, United States Code, is amend-  
5 ed—

6 (1) in the heading, by striking “**2024**” and in-  
7 serting “**2030**”; and

8 (2) by striking “2024” each place it appears  
9 and inserting “2030”.

10 **SEC. 306. UNITED STATES POLICY ON ORBITAL DEBRIS.**

11 (a) SENSE OF CONGRESS.—It is the sense of Con-  
12 gress that—

13 (1) existing guidelines for the mitigation of or-  
14 bital debris may not be adequate to ensure long term  
15 usability of the space environment for all users; and

16 (2) the United States should continue to exer-  
17 cise a leadership role in developing orbital debris  
18 prevention standards that can be used by all space-  
19 faring nations.

20 (b) POLICY OF THE UNITED STATES.—It is the pol-  
21 icy of the United States to have consistent standards  
22 across Federal agencies that minimize the risks from or-  
23 bital debris in order to—

24 (1) protect the public health and safety;

25 (2) protect humans in space;

- 1 (3) protect the national security interests of the
- 2 United States;
- 3 (4) protect the safety of property;
- 4 (5) protect space objects from interference; and
- 5 (6) protect the foreign policy interests of the
- 6 United States.

7 **SEC. 307. LOW-EARTH ORBIT COMMERCIALIZATION PRO-**  
8 **GRAM.**

9 (a) PROGRAM AUTHORIZATION.—The Administrator  
10 of NASA may establish a low-Earth orbit commercializa-  
11 tion program to encourage the fullest commercial use and  
12 development of space by the private sector of the United  
13 States.

14 (b) CONTENTS.—The program under subsection (a)  
15 may include—

- 16 (1) activities to stimulate demand for human
- 17 space flight products and services in low-Earth orbit;
- 18 (2) activities to improve the capability of the
- 19 ISS to accommodate commercial users; and
- 20 (3) subject to subsection (c), activities to accel-
- 21 erate the development of commercial space stations
- 22 or commercial space habitats.

23 (c) CONDITIONS.—

24 (1) COST SHARE.—The Administrator shall give  
25 priority to an activity under subsection (b)(3) in

1       which the private sector entity conducting the activ-  
2       ity provides a share of the cost to develop and oper-  
3       ate the activity.

4           (2) COMMERCIAL SPACE HABITAT.—The Ad-  
5       ministration may not engage in an activity under  
6       subsection (b)(3) until after the date that the Ad-  
7       ministrator of NASA awards a contract for the use  
8       of a docking port on the ISS.

9       (d) REPORTS.—Not later than 30 days after the date  
10      that an award or agreement is made under subsection  
11      (b)(3), the Administrator of NASA shall submit to the  
12      Committee on Commerce, Science, and Transportation of  
13      the Senate and the Committee on Science, Space, and  
14      Technology of the House of Representatives a report on  
15      the development of the commercial space station or com-  
16      mercial space habitat, as applicable, including a business  
17      plan for how the activity will—

18           (1) meet NASA's future requirements for low-  
19      Earth orbit human space flight services; and

20           (2) satisfy the non-Federal funding requirement  
21      under subsection (c)(1).

22      (e) AUTHORIZATION OF APPROPRIATIONS.—There is  
23      authorized to be appropriated to the Administrator of  
24      NASA to carry out a low-Earth commercialization pro-

1 gram under this section \$150,000,000 for fiscal year  
2 2020.

3 **SEC. 308. BUREAU OF SPACE COMMERCE.**

4 (a) IN GENERAL.—Chapter 507 of title 51, United  
5 States Code, is amended—

6 (1) in the heading, by striking “**OFFICE**” and  
7 inserting “**BUREAU**”;

8 (2) by amending section 50701 to read as fol-  
9 lows:

10 **“§ 50701. Definition of Bureau**

11 “In this chapter, the term ‘Bureau’ means the Bu-  
12 reau of Space Commerce established in section 50702 of  
13 this title.”;

14 (3) in section 50702—

15 (A) by amending subsection (a) to read as  
16 follows:

17 “(a) IN GENERAL.—There is established within the  
18 Department of Commerce a Bureau of Space Commerce.”;

19 (B) by amending subsection (b) to read as  
20 follows:

21 “(b) ASSISTANT SECRETARY.—The Bureau shall be  
22 headed by an Assistant Secretary for Space Commerce,  
23 to be appointed by the President with the advice and con-  
24 sent of the Senate and compensated at level II or III of  
25 the Executive Schedule, as determined by the Secretary

1 of Commerce. The Assistant Secretary shall report directly  
2 to the Secretary of Commerce.”;

3 (C) in subsection (c)—

4 (i) in the matter preceding paragraph  
5 (1), by striking “Office” and inserting  
6 “Bureau”;

7 (ii) in paragraph (2), by inserting “,  
8 including activities licensed under chapter  
9 601 of this title” before the semicolon; and

10 (iii) in paragraph (5), by striking  
11 “Position,” and inserting “Positioning,”;  
12 and

13 (D) in subsection (d)—

14 (i) in the heading, by striking “DI-  
15 RECTOR” and inserting “ASSISTANT SEC-  
16 RETARY”;

17 (ii) in the matter preceding paragraph  
18 (1)—

19 (I) by striking “Director” and in-  
20 serting “Assistant Secretary”; and

21 (II) by striking “Office shall”  
22 and inserting “Bureau shall, under  
23 the direction and supervision of the  
24 Secretary.”;

1 (iii) by redesignating paragraphs (1)  
2 through (7) as paragraphs (3) through (9),  
3 respectively; and

4 (iv) by inserting before paragraph (3),  
5 as redesignated, the following:

6 “(1) to oversee the issuing of licenses under  
7 chapter 601 of this title;

8 “(2) coordinating Department policy impacting  
9 commercial space activities and working with other  
10 executive agencies to promote policies that advance  
11 commercial space activities;” and

12 (v) in paragraph (8), as redesignated,  
13 by inserting “, consistent with the inter-  
14 national obligations, foreign policy, and na-  
15 tional security interests of the United  
16 States” before the semicolon;

17 (4) in section 50703—

18 (A) by striking “Office” and inserting  
19 “Bureau”; and

20 (B) by striking “Committee on Science and  
21 Technology of the House of Representatives”  
22 and inserting “Committee on Science, Space,  
23 and Technology of the House of Representa-  
24 tives”; and

25 (5) by adding at the end the following:

1 **“§ 50704. Authorization of appropriations**

2 “There is authorized to be appropriated to the Sec-  
3 retary of Commerce to carry out this chapter \$10,000,000  
4 for each of fiscal years 2020 through 2024.”.

5 (b) TECHNICAL AND CONFORMING AMENDMENTS.—

6 (1) TABLE OF CONTENTS.—The table of con-  
7 tents of chapter 507 of title 51, United States Code,  
8 is amended—

9 (A) in the item relating to section 50701,  
10 by striking “Office” and inserting “Bureau”;  
11 and

12 (B) by adding after the item relating to  
13 section 50703 the following:

“50704. Authorization of appropriations.”.

14 (2) TABLE OF CHAPTERS.—The table of chap-  
15 ters of title 51, United States Code, is amended in  
16 the item relating to chapter 507 by striking “Office”  
17 and inserting “Bureau”.

18 (3) COOPERATION WITH FORMER SOVIET RE-  
19 PUBLICS.—Section 218 of the National Aeronautics  
20 and Space Administration Authorization Act, Fiscal  
21 Year 1993 (51 U.S.C. 50702 note) is amended by  
22 striking “Office” each place it appears and inserting  
23 “Bureau”.